



### 3.1.9 Electrical Engineering

#### FIRST YEAR

Fall Semester				Spring Semester					
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	Total
EE-125	Basic Electrical Engineering	3	1	4	EE-156	Engineering Drawing	0	2	2
PH-122	Applied Physics	3	1	4	EE-126	Circuit Analysis	3	1	4
HS-114	Functional English	3	0	3	MT-227	Differential Equation	3	0	3
ME-107	Basic Mechanical Engineering	3	1	4	CE-109	Engineering Surveying-I	2	1	3
MT-114	Calculus	3	0	3	EE-163	Computer and Programming	3	1	4
					HS-105	Pakistan Studies OR	2	0	2
					HS-127	Pakistan Studies (For Foreigners)			
					HSK-I	Chinese Language			NC

#### SECOND YEAR

Fall Semester				Spring Semester					
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	Total
EL-240	Electronic Devices & Circuits	3	1	4	EE-382	Electromagnetic Fields	2	0	2
EE-264	Data Structures and Algorithms	2	1	3	EE-223	Instrumentation and Measurement	2	1	3
MT-272	Linear Algebra & Geometry	3	0	3	EE-231	Signals and Systems	3	1	4
MT-226	Multi Variable Calculus	3	0	3	CS-205	Logic Design & Switching Theory	3	1	4
HS-214	Academic Writing	3	0	3	MT-331	Probability and Statistics	3	0	3
HS-205	Islamic Studies OR	2	0	2					
HS-209	Ethical Behaviour								
HSK-II	Chinese Language			NC					

#### THIRD YEAR

Fall Semester				Spring Semester					
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	Total
EE-345	Electrical Machines	3	1	4	EE-362	Power System Analysis	3	1	4
EE-394	Digital Signal Processing	2	1	3	EE-352	Electrical Power Transmission	3	0	3
EE-359	Electrical Power Distribution and Utilization	3	1	4	EE-374	Feedback Control Systems	3	1	4
EL-343	Power Electronics	3	1	4	TC-307	Communication Systems	3	1	4
MT-471	Applied Numerical Methods	2	1	3	HS-304	Business Communication & Ethics	3	0	3

#### FINAL YEAR

Fall Semester				Spring Semester					
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	Total
EE-457	Electrical Power System Protection	3	1	4	MG-482	Organizational Behavior	3	0	3
EE-411	Power Generation	3	0	3	MG-481	Entrepreneurship	2	0	2
CS-430	Microprocessor Programming & Interfacing	3	1	4	EE-412	Alternate Energy Systems	3	0	3
EF-304	Occupational Safety and Health	2	0	2	CS-418	Computer Communication Networks	2	1	3
EF-305	Engineering Economics & Management	3	0	3	EE-401	Electrical Engineering Project	0	3	3
EE-401	*Electrical Engineering Project	0	3	3					

\* Duration one academic year: Requires literature survey and preliminary work during this Semester